

WHAT IS CLAIMED IS:

1. A carrier device for an optical scanner at least having a document platform, the carrier device comprising:

a trough-shaped base having a trough opening and a first magnet at a

5 bottom of the trough opening;

a contact image sense (CIS) scanning module having a scanning surface, wherein the CIS scanning module is enclosed within the trough opening with the scanning surface of the scanning module near the trough opening and facing the document platform;

10 a second magnet attached to a bottom surface of the CIS scanning module, wherein the second magnet occupies an area comparable in size to the bottom surface of the CIS scanning module, and the second magnet and the first magnet face each other such that respective identical poles thereof face each other and produce a repulsion for supporting the CIS scanning module; and

15 a plurality of buffer plates attached to interior edges of the scanning surface in contact with the document platform.

2. The carrier device of claim 1, wherein the CIS scanning module may move up or down relative to the bottom of the base within the trough opening.

20 3. A carrier device for an optical scanner having at least a document platform, the carrier device comprising:

a trough-shaped base having a trough opening;

a contact image sense (CIS) scanning module having a scanning surface, wherein the CIS scanning module is enclosed within the trough opening with the scanning surface of the scanning module near the trough opening and facing the

document platform, and a gap exists between four sidewalls of the trough opening and sides of the CIS scanning module;

a seal ring plugged into the gap to form an sealed chamber between the four sidewalls of the trough opening and the CIS scanning module, wherein the sealed chamber contains a fluid; and

a plurality of buffer plates attached to interior edges of the scanning surface in contact with the document platform.

4. The carrier device of claim 3, wherein the CIS scanning module may move up or down relative to the bottom of the base within the trough opening.

5. The carrier device of claim 3, wherein the fluid includes a liquid.

6. The carrier device of claim 3, wherein the fluid includes a pressurized gas.

7. The carrier device of claim 3, wherein the sealed chamber further includes a pipeline connected to a pump so that pressure of the fluid within the sealed chamber may be regulated.